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AEROFLEX COLORADO SPRINGS, INC.
9

10 UNITED STATES DISTRICT COURT
11 NORTHERN DISTRICT OF CALIFORNIA
12 SAN FRANCISCO DIVISION
13

14 RICOH COMPANY, LTD.,

15 Plaintiff,

16 vs.

17 AEROFLEX INCORPORATED, AMI
SEMICONDUCTOR, INC., MATROX
18 ELECTRONIC SYSTEMS LTD., MATROX
GRAPHICS INC., MATROX
19 INTERNATIONAL CORP., MATROX TECH,
INC., AND AEROFLEX COLORADO
20 SPRINGS, INC.

21 Defendants.
22

SYNOPSYS, INC.,

23 Plaintiff,

24 vs.

25 RICOH COMPANY, LTD.,

26 Defendant.
27
28

Case No. C03-4669 MJJ (EMC)

Case No. C03-2289 MJJ (EMC)

**NOTICE OF MOTION AND MOTION FOR
SUMMARY JUDGMENT OF NON-
INFRINGEMENT (OTHER ELEMENTS)**

[SUMMARY JUDGMENT MOTION NO. 6]

Date: September 26, 2006
Time: 9:30 a.m.
Courtroom: 11, 19th Floor
Judge: Hon. Martin J. Jenkins

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NOTICE OF MOTION AND MOTION

PLEASE TAKE NOTICE that on September 26, 2006, at 9:30 a.m., before the Honorable Martin J. Jenkins in Courtroom 11, 19th Floor, in the United States District Court, 450 Golden Gate Avenue, San Francisco, California, Plaintiff Synopsys, Inc. ("Synopsys") and Defendants Aeroflex Incorporated, Aeroflex Colorado Springs, Inc., AMI Semiconductor, Inc., Matrox Electronic Systems Ltd., Matrox Graphics Inc., Matrox International Corp., and Matrox Tech, Inc. ("the Customer Defendants") will move for summary judgment pursuant to Rule 56 of the Federal Rules of Civil Procedure that the Customer Defendants do not infringe claims 13-17 of U.S. Patent No. 4,922,432 ("the '432 patent"). This motion is based on the memorandum of points and authorities set forth below, the accompanying declarations, exhibits, and proposed order, the oral arguments of counsel at the hearing on this motion, and all other pleadings and matters of record in these actions.

MEMORANDUM OF POINTS AND AUTHORITIES**I. INTRODUCTION**

The amount of discovery that Ricoh has obtained from Synopsys and the Customer Defendants in this litigation is staggering and mind-boggling: over 12 million pages of documents, 240 hours of depositions, and full access to Synopsys' accused Design Compiler software source code for more than two years. Yet despite this wealth of information at its fingertips, Ricoh still cannot come up with a coherent theory of infringement against the Customer Defendants. Ricoh alleges that the Customer Defendants infringe the '432 patent by designing application specific integrated circuits ("ASICs") using Synopsys' Design Compiler system, and has accused over 350 Customer Defendant designs made through this allegedly infringing process. But it is obvious from the bare-bones expert reports recently submitted by Ricoh's infringement experts that Ricoh is unable to put together the necessary facts to support these allegations. Rather than engaging in any rigorous analysis of how the language of the '432 patent claims as construed by this Court compares to *the actual operation* of the Design Compiler system and the accused Customer Defendant designs, Ricoh's experts instead make generalized, conclusory statements that the elements of the asserted '432 claims can be found in the Design Compiler system and the accused designs.

Ricoh's infringement theory is so technically flawed and devoid of merit that it fails at virtually

every step of the asserted process claims. Given Ricoh's abject failure to come forward with a legitimate theory of infringement against the Customer Defendants, this case should not be allowed to continue any longer (certainly not to trial), and the Court should grant summary judgment of non-infringement with respect to all of the asserted claims and all of the accused Customer Defendant designs. In addition, because it is obvious that the Synopsys tools are not capable of infringing the asserted patent, summary judgment of noninfringement should be granted in favor of Synopsys on its declaratory judgment claim.

II. STATEMENT OF FACTS

A. The Asserted Patent Claims

Ricoh alleges that the Customer Defendants infringe claims 13-17 of the '432 patent by designing application specific integrated circuits ("ASICs") using Synopsys' Design Compiler system software. The '432 patent relates generally to a computer-aided design ("CAD") system for ASIC design in which a user inputs a description of the desired operations for the ASIC into the CAD system. The output of the system, after a series of steps, is a "netlist" defining the hardware cells which are needed to perform the desired function of the integrated circuit. Ricoh has asserted that the Customer Defendants infringe claims 13-17 of the '432 patent under a theory of literal infringement, as opposed to infringement under the doctrine of equivalents.¹ See Ex. 2 at 25:25-27.

Claim 13 of the '432 patent is the *only* independent claim asserted by Ricoh.² Thus, if even one element of Claim 13 is found not to be met, this case is over. The text of Claim 13 reads:

A computer-aided design process for designing an application specific integrated circuit which will perform a desired function comprising:

[A] storing a set of definitions of architecture independent actions and conditions;

[B] storing data describing a set of available integrated circuit hardware cells for performing the actions and conditions defined in the stored set;

¹ None of Ricoh's experts alleges that the Customer Defendants infringe the '432 patent under the doctrine of equivalents, nor is there any such allegation in Ricoh's Final Infringement Contentions under Patent L.R. 3-6.

² Claims 14-17 are all dependent on claim 13.

[C] storing in an expert system knowledge base a set of rules for selecting hardware cells to perform the actions and conditions;

[D] describing for a proposed application specific integrated circuit a series of architecture independent actions and conditions;

[E] specifying for each described action and condition of the series one of said stored definitions which corresponds to the desired action or condition to be performed; and

[F] selecting from said stored data for each of the specified definitions a corresponding integrated circuit hardware cell for performing the desired function of the application specific integrated circuit, said step of selecting a hardware cell comprising applying to the specified definition of the action or condition to be performed, a set of cell selection rules stored in said expert system knowledge base and generating for the selected integrated circuit hardware cells, a netlist defining the hardware cells which are needed to perform the desired function of the integrated circuit and the interconnection requirements therefor.³

Generally, claim 13 requires that three sets of data be stored in a CAD system: (1) a set of “definitions of architecture independent actions and conditions” (element A); (2) data describing “hardware cells” for performing those actions and conditions (element B); and (3) a set of “rules” for selecting the hardware cells to perform the actions and conditions (element C). Once these three sets of data have been stored, a user describes a series of “architecture independent actions and conditions” that the user wants to include in the desired ASIC (element D)⁴. The CAD system then takes that user description and specifies a definition from the set of definitions stored in element A (element E). The CAD system then applies the selection rules from element C to each specified definition of element E to “select” from the stored data describing the hardware cells (element B), a hardware cell that corresponds to the specified architecture independent action or condition (element F). The system then generates a netlist defining the hardware cells which are needed to perform the desired function of the integrated circuit (element F).

Claim 13 makes clear that the claimed process requires that the steps be performed in a specific sequence. First, elements A and D *must* be performed before element E. Element E

³ The elements of claim 13 have been designated by letter for easy reference.

⁴ This description can be done in the form of a flowchart.

1 Defendant witnesses and served the maximum number of written discovery requests.

2 On March 24, 2006, Ricoh served its Final Infringement Contentions (“FICs”). The FICs were
 3 supplemented on June 23, 2006. In its FICs, Ricoh asserts that the Customer Defendants literally
 4 infringe the ’432 patent claims, but does not assert any theory of infringement under the doctrine of
 5 equivalents. Ex. 2 and 3 at 25:24-27; 6/23/06 Supp. FICs].⁶ Also on June 23, 2006, Ricoh served six
 6 infringement expert reports – three from Dr. Donald Soderman (one each for Aeroflex, Matrox, and
 7 AMI), and three from Dr. Marios Papaefthymiou (one each for Aeroflex, Matrox, and AMI). Exs 9
 8 and 11. The three reports of Dr. Soderman are virtually identical to one another, with only minor
 9 variations depending on the Customer Defendant. The same is true for the three reports of Dr.
 10 Papaefthymiou.⁷ The Soderman report is 36 double-spaced pages; of which the first 8 pages are just
 11 background; the Papaefthymiou report is 16 double spaced pages.

12 Dr. Soderman serves as Ricoh’s primary infringement expert. He opines that the Customer
 13 Defendants have literally infringed claims 13-17 of the ’432 patent through their creation of over 350
 14 ASIC designs using the Design Compiler system. *See* Ex. 12. Dr. Papaefthymiou’s expert report is
 15 much narrower in scope. Dr. Papaefthymiou only opines that the Customer Defendants’ inputs to the
 16 Design Compiler system constitute descriptions of “architecture independent actions and conditions,”
 17 as that term is used in element D of claim 13 (Ex. 10 at 2:7-16), which is addressed in a separate
 18 summary judgment motion served on Ricoh contemporaneous with the filing of this Motion.

19 **III. ARGUMENT**

20 **A. Legal Standard**

21 Summary judgment is proper “if the pleadings, depositions, answers to interrogatories and
 22 admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any
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 25 ⁶ Moreover, although these infringement contentions cite to a number of documents, they cite to very minimal deposition
 26 testimony, only one or two lines of code from each of the accused ASIC designs, and very little Synopsys source code.
 They mostly contain snippets from documents that Ricoh, for the most part, had in its possession prior to the claim
 construction hearing.

27 ⁷ Because the reports are virtually identical, page and line citations to the reports herein will be limited to the reports
 28 pertaining to the Aeroflex entities (Exs. 9A and 11A).

1 material fact and that the moving party is entitled to a judgment as a matter of law.” Fed. R. Civ. P.
 2 56(c). In the context of a patent case, this means that an accused infringer seeking summary judgment
 3 of non-infringement may meet its initial responsibility either by providing evidence that would
 4 preclude a finding of infringement, or by showing that the evidence on file fails to establish a material
 5 issue of fact essential to the patentee’s case. *See Novartis Corp. v. Ben Venue*, 271 F.3d 1043, 1046,
 6 1050-51, 1055 (Fed. Cir. 2001). Once the moving party makes this initial showing, the burden shifts to
 7 the non-moving party to “designate specific facts showing that there is a genuine issue for trial.”
 8 *Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986) (citation omitted); *Aguilera v. Pirelli Armstrong*
 9 *Tire Corp.*, 223 F.3d 1010, 1019 (9th Cir. 2000) (citation omitted) (“On a motion for summary
 10 judgment, the non-moving party cannot simply rest on its allegations without any significant probative
 11 evidence tending to support the complaint”).

12 Determining whether a patent claim has been infringed involves two steps: (1) claim
 13 construction to determine the scope of the claims, followed by (2) determination of whether the
 14 properly construed claim encompasses the accused devices. *Vitronics v. Conceptronic, Inc.*, 90 F.3d
 15 1576, 1581-82 (Fed. Cir. 1996). Literal infringement requires that the patentee prove that the accused
 16 product or process meets every element or limitation of a claim. *Rohm and Haas Co. v. Brotech Corp.*,
 17 127 F.3d 1089, 1092 (Fed. Cir. 1997). If even one element or limitation is missing or is not met as
 18 claimed, then there is no literal infringement. *See Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d
 19 1206, 1211 (Fed. Cir. 1998); *see also Lantech, Inc. v. Keip Mach. Co.*, 32 F.3d 542, 547 (Fed. Cir.
 20 1994) (“For literal infringement, each limitation of the claim must be met by the accused device
 21 exactly, any deviation from the claim precluding a finding of infringement.”). Summary judgment of
 22 no literal infringement is appropriate when no reasonable jury could find every limitation recited in an
 23 asserted claim is found exactly in the accused device. *See Johnston v. IVAC Corp.*, 885 F.2d 1574,
 24 1576-80 (Fed. Cir. 1989).

25 **B. The Customer Defendants Do Not Use The Design Compiler System To Design An**
 26 **ASIC, Describe An ASIC, Or To Generate The Netlist For An ASIC As Required**
 27 **By The Preamble, The Describing Step, and Element F of Claim 13.**

28 The preamble to Claim 13 recites that the claimed process is “for designing *an application*

1 *specific integrated circuit* which will perform a desired function.” Ex. 1 at col.16:34-36 (emphasis
2 added). In addition, element D also requires describing “for a proposed application specific integrated
3 circuit a series of architecture independent actions.” Moreover, the final portion of element F requires
4 “generating . . . a netlist defining the hardware cells which are needed to perform the desired function
5 of the integrated circuit and the interconnection requirements therefore.” Ex. 1 at col.16:61-65.
6 Pursuant to this language, the netlist that is the final output of the claimed system must represent a
7 *complete* description of all of the hardware cells and interconnections that are necessary for the
8 *complete* ASIC. This is also confirmed by claim 14, which requires that the netlist output from claim
9 13 be used to generate mask data for manufacturing an ASIC. In sum, the claimed system is a process
10 to design an ASIC – not simply a portion, or an incredibly small portion, of an ASIC. Indeed, the
11 whole genesis of the conception of the invention contained in the ‘432 patent was to simplify VLSI
12 design. Using the system to design just one or two adders – or having to add logic designs from other
13 sources to actually manufacture the ASIC – was clearly not what the inventors had in mind or were
14 claiming.

15 This requirement that the resultant netlist represent a complete description of the hardware cells
16 for the entire ASIC is important, because Ricoh has failed to show that, in *each* of the over **350**
17 accused designs, the Customer Defendant used Design Compiler to generate a netlist representing the
18 *entire* desired ASIC. Indeed, Ricoh has undertaken *no* analysis in this regard. On this basis alone,
19 summary judgment should be granted.

20 Ricoh has not undertaken this analysis because it cannot succeed on this issue. First, many of
21 the accused Customer Defendant designs are for “mixed-signal” products that contain both analog and
22 digital portions. Casavant Decl. ¶ 8 and Ex. 1. Design Compiler, however, can only be used to design
23 digital portions of ASICs. Casavant at ¶ 8. Thus, for the accused mixed-signal products, claim 13
24 cannot be infringed because those products could not be completely designed using Design Compiler.

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4 Furthermore, Ricoh's experts do not address the fact that Design Compiler cannot be used to
5 design certain portions of an ASIC design, such as instantiated pad cells, asynchronous logic, and
6 hand-instantiated logic. Casavant Decl. at ¶ 10. Thus, because the netlists output from Design
7 Compiler simply are not the complete netlists for the accused ASICs, summary judgment of
8 noninfringement should be granted on this issue as well.

9 **C. Element A Is Not Practiced By The Accused Design Compiler System**

10 The first element A of claim 13 requires "storing a set of definitions of architecture
11 independent actions and conditions." Ex. 1, col.16:37-38. The Court construed "a set of definitions of
12 architecture independent actions and conditions" as "a library of definitions of the different
13 architecture independent actions and conditions that can be selected for use in the desired ASIC." Ex.
14 8 at 13:11-14. Moreover, "said stored definitions" stored in element A are the definitions that are
15 specified in element E.

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20 Like the square peg/round hole argument relating to "hardware
21 cells," discussed in Motion No. 2, Dr. Soderman has fabricated this set of so-called "generic
22 operators," which, as explained below, are not stored in any library, are stored in different places, and
23 generated by different means.

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2 Element A is not practiced by the Design Compiler system for several reasons. First, there is
3 no “library of definitions.” Indeed, Dr. Soderman points to different conceptual constructs stored in
4 different locations as jointly comprising the alleged library. This argument is facially flawed. Second,
5 the allegedly stored definitions are not used in the specifying step. Finally, the allegedly stored
6 definitions are not definitions at all – as Ricoh has essentially conceded by having its expert opine that
7 “names” of various data structures – alone and with no other associated information – are the stored
8 definitions.

9 **1. The Design Compiler System Does Not Store a “Set of Definitions of**
10 **Architecture Independent Actions and Conditions.”**

11 Based on Dr. Soderman’s report alone, it is clear that there is no “library of definitions of
12 architecture independent actions and conditions” as required by the Court’s claim construction.
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16 Because no library has been identified, summary judgment is appropriate on
17 this basis alone.
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9 In addition, the implementation table cannot meet the requirements of element A, because of
10 the sequence in which the steps of claim 13 must be performed. As discussed above, the storing of the
11 library of definitions in element A must occur prior to element F because of the order of steps implied
12 by the language of the claim. It is undisputed that the implementation table does not exist until the
13 “compile” command has been issued. Ex 11A (Soderman) at 20:3-5; Ex. 52 (Tran) at 153:19-154:22;
14 155:8-13. But Ricoh asserts that the Customer Defendants’ alleged use of the “compile” command
15 occurs in element F of claim 13. Ex 3, Ex. 65 at 18; Ex. 11A (Soderman) at 27:7-13. Thus, the
16 implementation table does not exist prior to the performance of element F.

17 Finally, the Design Compiler source code cannot constitute a library. The source code is very
18 different from a “library.” One “selects” things from a library, but one “executes” code. Casavant
19 Decl. ¶ 16.

20 **2. None of the “Generic Operators” Can Be the Definitions Stored in Element**
21 **A Because They Are Not Created Until Element E.**

22 The fact that the steps of claim 13 must be performed in a particular sequence provides an
23 additional reason why the so-called “generic operators” cannot constitute the definitions of actions and
24 conditions stored in element A. As discussed above, claim 13 requires that the “storing” step of
25 element A must be performed before the “specifying” step of element E because element E requires a
26 comparison between data stored in element A and the actions and conditions described in element D.
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This, however, is a fundamental misunderstanding of how HDL Compiler and Design Compiler work.

Consequently, there is no way that any of these definitions can be stored prior to the “specifying” step. Thus, none of the objects that Dr. Soderman identifies as “generic operators” could possibly be the definitions stored in element A.

3. The Names of the “Generic Operators” Are Not “Definitions.”

Finally, Dr. Soderman’s infringement theory is flawed with respect to element A because he does not point to any real “definitions” of the “generic operators.” Instead, Dr. Soderman simply argues that the names of the generic operators constitute the “definitions” of those generic operators. Ex. 13 (Soderman) at 156:2-157:3, 158:24-160:6, 165:17-24, 255:15-19. This argument is meritless. Under its ordinary meaning, a “definition” of an object is some sort of description of the object’s characteristics, not simply its name. And as noted by Dr. Casavant, the language of the ’432 patent suggests that the “definitions” of actions and conditions stored in element A must include not only the name of the action or condition, but also information regarding its function and its relationship to actual hardware cells. Casavant Decl., ¶¶ 11-13. But even if one does not accept all of the details of Dr. Casavant’s definition, clearly more than a name is required.

D. Element C Is Not Practiced By The Accused System.

Element C of claim 13 requires “storing in an expert system knowledge base a set of rules for selecting hardware cells to perform the actions and conditions.” Ex. 1, col. 16:42-44. The Court also

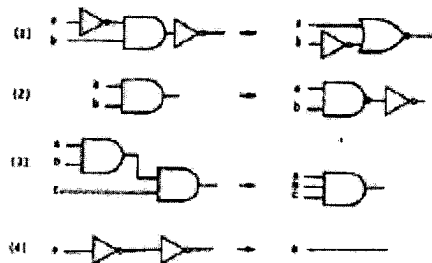
1 construed the term “a set of cell selection rules” in element F to mean “a set of rules embodying the
2 expert knowledge of highly skilled VLSI designers, each rule having an antecedent portion (e.g., IF)
3 and a consequent portion (e.g. THEN).” Ex. 8 at 19.⁸

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13 One requirement of the “rules” stored in element C and applied in element F is that they must
14 embody “expert knowledge of highly skilled VLSI designers.” “VLSI” refers to “very large scale
15 integration” technology. Ex. 7 at 2:16]. VLSI designers “possess the highly specialized skills needed
16 to create structural level integrated circuit hardware descriptions.” Ex. 7 at 2:13-17.

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27 ⁸ The rules are applied to the definitions stored in element A and specified in element E to select the appropriate hardware
28 cell from the hardware cells stored in element B and the rules are cell selection rules. This issue is addressed in Motion No. 2.

Another requirement of the “rules” stored in element C and applied in element F is that they must “hav[e] an antecedent portion (e.g. IF) and a consequent portion (e.g. THEN).” Ex. 8 at 10. With regard to this issue, Dr. Soderman once again makes conclusory statements in his expert report that are unsupported by specific facts.

See On-Line Techs., Inc., v. Bodenseewerk Perkin-Elmer GmbH, 386 F.3d 1133, 1144 (Fed. Cir. 2004); *Arthur A. Collins, Inc. v. N. Telecom Ltd.*, 216 F.3d 1042, 1046 (Fed. Cir. 2000) ; *United States v. Various Slot Machines On Guam*, 658 F.2d 697, 700 (9th Cir. 1981).



E. Element D Is Not Practiced By the Customer Defendants

As explained in Motion No. 1, element D is not met because architecture independent input is not described for each of the accused ASICs.

F. Element E Is Not Practiced By The Accused System

Element E requires “specifying *for each* described action and condition of the series *one* of said stored definitions which corresponds to *the* desired action or condition to be performed.” Ex. 1, col. 16:48-51 (emphasis added). The Court construed this phrase as “specifying *for each* desired functional specification [i.e., action or condition] to be performed by the desired ASIC *one* of the definitions from the set of stored definitions.”⁹ Ex. 8 at 22 (emphasis added). Thus, element E describes a matching up of actions and conditions described in element D with the definitions stored in element A. Importantly, the language of the Court’s claim construction here states that “*one* of the definitions from the set of stored definitions” in element A must be specified “*for each* desired functional specification to be performed” (emphasis added). Element E therefore requires that every desired function described in element D must be matched up with the corresponding definition stored in element A. In other words, this step must produce a one-to-one correspondence between the number of functions described in element D and the number of definitions from element A that are specified.

Ex. 11A (Soderman) at 25:15-22. As discussed above, element E requires that there be a one-to-one correspondence between the number of functions described in element D and the number of definitions from element A that are specified.

⁹ As set forth above with regard to element A, the Design Compiler system does not use the alleged “stored definitions.” Thus, it is equally true (and this issue could alternatively have been discussed in the context of this element) that this element is not met because the Design Compiler system does not specify definitions from the “stored definitions.”

Dr. Soderman admitted that he did not consider this issue as significant to his analysis Ex. 13 (Soderman) at 184:11-185:11, nor is there any discussion of this issue in Ricoh's Final Infringement Contentions. Thus, summary judgment is appropriate on this basis alone.¹⁰

G. Element F Is Not Practiced By The Accused System. ¹¹

The language of Element F refers to "selecting from said stored data for *each* of the specified definitions *a* corresponding integrated circuit hardware cell" (emphasis added). Similar to element E, this language indicates that there must be a one-to-one correspondence between each specified definition and each corresponding hardware cell. And because element E also requires a one-to-one correspondence between the number of functions described in the input description and the number of specified definitions, there must also be a one-to-one correspondence between the number of functions described in the input description and the number of hardware cells selected for inclusion in the netlist in the final element F step. Again, Dr. Soderman did not analyze this issue because he did not think it was significant, and thus, summary judgment is appropriate on this basis alone. Ex. 13 (Soderman) at 61:20-63:3; 184:11-185:11. In fact, Dr. Soderman believes that the Design Compiler system does *not* produce such a one-to-one correspondence. Ex. 13 (Soderman) at 58:15-20; 183:22-184:10.¹²

H. Claims 14-17 Are Not Infringed.

Claims 14-17 are all dependent on claim 13. Ex. 1, col. 16:14-17:10. Thus, if the Court finds

¹⁰ There are frequently cases where not every function in the Customer Defendants' input description is matched up with a synthetic operator. For example, if the input description contains an addition of two constants, the "+" in the input description is not mapped to any synthetic operator because there is no need for an adder. Instead, the two constants are simply added together and a new constant is calculated. Casavant Decl. ¶ 51. Dr. Casavant identifies several other examples where the number of functions described in the input description for the ASIC design is not the same as the number of synthetic operators.

¹¹ Other elements of element F are discussed in Motion No. 2.

¹² This is further confirmed by Dr. Casavant's analysis, in which he found a few examples of situations in exemplary accused designs where the number of hardware cells generated by the Design Compiler system for inclusion in the final netlist does not correspond to the number of functions described in the input description. Casavant Decl. ¶ 54.

1 that claim 13 is not infringed, then claims 14-17 also are not infringed. *See Wahpeton Canvas Co.,*
2 *Inc. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989) (“One who does not infringe an
3 independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that
4 claim.”). In addition to the arguments asserted above for why claim 13 is not infringed, however, there
5 are additional reasons why claims 14 and 16 are not infringed.

6 Claim 14 recites: “A process as defined in claim 13, including generating from the netlist the
7 mask data required to produce an integrated circuit having the desired function.” Ex. 1, col. 16:66-68.
8 Ricoh has presented no evidence that, for any of the accused designs, the Customer Defendants
9 generated mask data from *the netlist output from the Design Compiler system*. In fact, no such
10 evidence exists because it is not possible to generate mask data directly from the netlist output of the
11 Design Compiler system. Instead, many processing steps must occur between the creation of a Design
12 Compiler netlist output and generation of mask data. Casavant Decl. ¶¶ 55-60; Ex. 53 (Packer) at
13 60:23-71:6. Even Ricoh concedes that the netlist output from Design Compiler must, at the very least,
14 be converted into something called a GDS II file before mask data can be generated. Ex. 3; Ex. 65 at
15 26. Moreover, even if a direct conversion to mask data is not required, Ricoh’s claims fail because the
16 subsequent processing steps modify the list of cells that are in the netlist. Casavant Decl. ¶¶ 55-60.
17 Thus under no circumstances – direct or not – is the netlist generated by Design Compiler used to
18 create the mask data needed to manufacture the chips. Finally, as set forth above, there is not a single
19 instance in which the netlist from Design Compiler is the netlist for the entire chip, and thus, mask data
20 for the ASIC is never created from the Design Compiler netlist.

21 Claim 16 recites: “A process as defined in claim 15 wherein said step of generating data paths
22 comprises applying to the selected cells a set of data path rules stored in a knowledge base and
23 generating the data paths therefrom.” Ex 1, col. 17:4-7.

24 Dr. Soderman makes the conclusory assertion in his report that “[s]ome of the tricks were
25 applied to the selected hardware cells to change their data connections in an attempt to further optimize
26 the circuit.” Ex. 11A (Soderman) at 33:4-6. Dr. Soderman does not identify any specific tricks in the
27 Design Compiler system that he believes to be “data path rules,” however. On this basis alone, this
28 Motion should be granted with respect to claim 16 (as well as claim 17, which depends on claim 16).

Moreover, contrary to Dr. Soderman's conclusory allegation, there are no SOT tricks that are specific to data paths or control paths. Casavant Decl. ¶ 62.

IV. CONCLUSION

Ricoh's theory of infringement is riddled with holes and insufficiently supported by the opinions of its experts, which are conclusory and completely devoid of any factual foundation. Given Ricoh's complete failure to present a coherent and factually supportable theory of infringement, no reasonable jury could find that every element of the asserted claims is practiced by the Customer Defendants exactly as written, as the standard for literal infringement requires. The Court should therefore grant summary judgment of non-infringement in favor of the Customer Defendants on all of the asserted '432 patent claims, and grant Synopsys summary judgment on its request for declaratory relief.

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